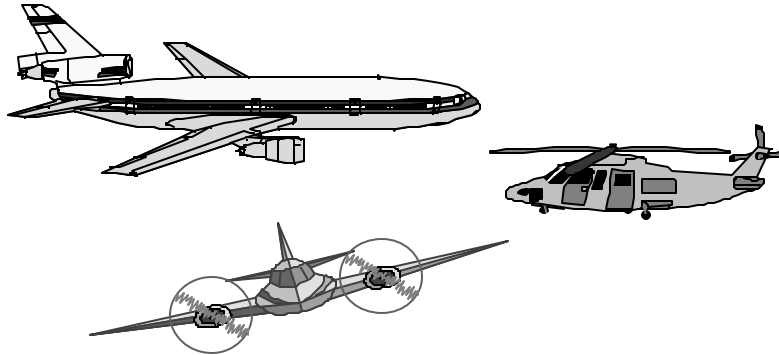


UPDATE ON FIELD APPROVALS



What is a Field Approval?

- An FAA approval in the field for non-complex mods
 - Issued by the FSDO for a **major alteration** to a TC'd product
 - Executed on a Form 337
 - Block 3 signed by the inspector - FAA Approval of the data
 - For one aircraft (model type and serial number)
- If the data has been approved, then FAA Approval is not needed - No signature on Block 3

NOTE: Form 337 is also used to document a **major repair**

- No alteration to the product - No signature on Block 3
- Perform to FAA Approved data

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

DEMAND ON FIELD APPROVALS

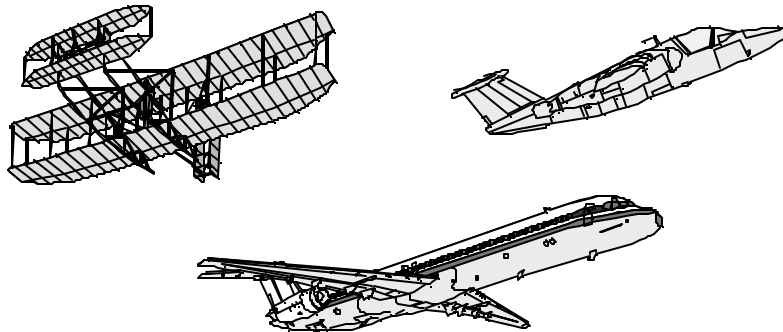
- Why?
 - To meet customer needs in a timely fashion
 - Reduces ACO admin. resources for a one-time STC
 - As a result, ACO redirects resources to other programs
 - FSDO has the authority but sometimes needs ACO/DER technical support
 - Implementation of LAACO/AWP-200 Working Agreement
 - Released on May 01, 1998
 - Partnership between ACO/FSDO/DER/Aviation Community

FIELD APPROVAL Vs. One-time STC

- Both are a major alteration (change) to type design
 - Accomplished per FAA Approved data
 - Meets all of affected regulations
 - For a specific aircraft model and serial number
 - Data may not be sufficient for duplication
 - Have equal legal recognition

LAACO & AWP-200 WORKING AGREEMENT

Guidance for Field Approvals
of a Major Repair/Alteration



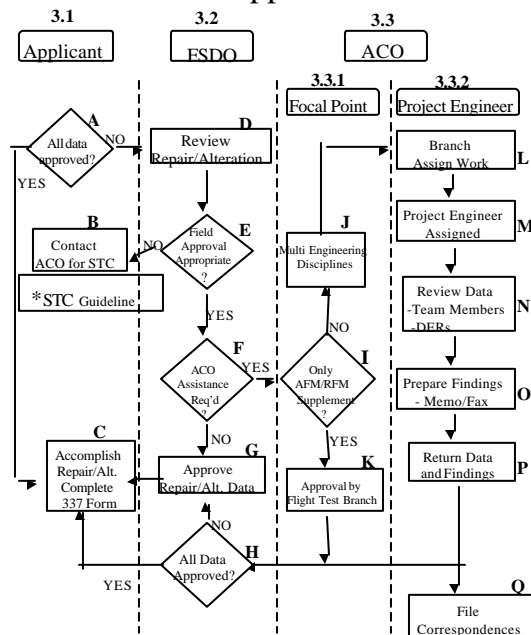
FIELD APPROVAL WORKING AGREEMENT

- Key Players
 - Applicant
 - FSDO Aviation Safety Inspector (ASI)
 - Aircraft Evaluation Group (AEG)
 - ACO Focal Point (FP)
 - ACO Project Engineer (PE)
 - Designated Engineering Representatives (DERs)

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

3.0 Field Approval Process



DER's INVOLVEMENT

- DO
 - Act as a LIASON between the applicant and FSDO/ACO
 - Develop and approve data within delegated functions (Major Repair/Alteration)
 - Make findings to applicable FARs
 - Perform compliance and installation reviews
 - Not a desk-top review
 - Mentor the inspectors regarding FAR compliance
 - If disagree on the approach, don't approve the data
 - Contact ACO Focal Points for further assessment

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

DER's INVOLVEMENT

- DO
 - Pertinent information on 8110-3
 - List specific regulations/areas that have been approved
 - List other areas/systems, **if known**, that need review/approval
 - Data submittals
 - Original 8110-3 to appointed ACO
 - Copy of 8110-3 and data to FSDO and modifiers (aircraft owners, repair stations)

DER's INVOLVEMENT

- DON'T
 - Approve the type of inspection and inspection intervals
 - Grant field approval (don't sign Block 3 of Form 337)
 - Conduct conformity inspection (don't sign Block 6)
 - Return the aircraft back to service (don't sign Block 7)
 - List inappropriate FAR's on 8110-3. For example:
 - 21.93 - Acoustical Change
 - 21.95 - Minor Change, 21.97 (Major Change)
 - 21.50 - IFCA
 - 43.13, Appendix A
 - AC 43.13-1B or -2A

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

DER's INVOLVEMENT

- DON'T
 - Approve repair station standard shop procedures and processes such as:
 - Personnel qualifications and training
 - Equipment/component handling
 - Receiving/inspecting/cleaning/shipping
 - NDT inspection procedures
 - Repair station Operating Spec. or IPM (Inspection Procedure Manual)
 - Approve generic process specs

DEFINITION of DATA

Information that defines the configuration, system(s), and/or its operation

- Process specifications
- Stress analysis, Electrical load analysis, etc.
- Drawings, sketches, or photos
- Engineering Orders (EOs)
- Service Bulletins (S/Bs)
- Design Limitations - Operation or Maintenance

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

APPROVED DATA

- Original Equipment Manufacturer (OEM) data
 - Structural Repair Manual (SRM)
 - Service Bulletins, Mod drawings
 - Repair processes & procedures
- DER approved data (Form 8110-3)
- Form 337s
- TCDS
- STC's
- Airworthiness Directives (AD's)
 - AMOC (Alternative Method of Compliance to the AD)

PREVIOUSLY APPROVED DATA

- Can be used as a basis to obtain field approvals
 - If the data is applicable and eligible to the mod
- Consists of:
 - One-time STC approved data,
 - Previously approved data via 337s (after 1955), or
 - SRM, mod drawings, etc.
- The acceptance is at the inspector's discretion
 - May vary from one to another based on their experience, and comfort level

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

USE of PREVIOUS STC APPROVED DATA

- A written statement must be provided (from the STC holder) if:
 - Any person who wishes to use the STC data to make a modification
 - Example: _____ may hereby use STC SAxxxxxx to modify (aircraft, aircraft engine, propeller, or appliance)

Reference: FAA Notice 8110.69, dated 6/30/97 and Public Law 104-264, Section 403
- Flight Standards will impose the above requirement prior to granting field approvals if based on STC approved data

ACCEPTABLE DATA

- Acceptable methods, techniques, and practices
 - AC 43.13-1B - Aircraft Repair & Inspection
 - AC 43.13-2A - Aircraft Alteration
 - Previously approved 337's data (after 1955)
 - ASTM, Mil-Spec, SAE, etc.
 - Original Equipment Manufacturer (OEM) data
 - Service/Overhaul Manual
 - Illustrated Parts Catalog (IPC) & Maintenance Manual (M/M)
 - U.S. Armed Services Tech Orders/Directives (TO/TD)
- NOTE:** Acceptable data can be used as an approval basis for obtaining FAA Approval

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

PROCESS SPECIFICATIONS

- From the ACO perspective, a process specification must contain the following information:
 - A procedure/process on how to perform a repair
 - A spec/standard that a repair is being performed too
- Some process specs require FAA approval
 - Not industry accepted practices/specs
 - Specific to a repair/component
 - Not contained in and/or deviation to the OEM procedures
- ACO generally does not approve **generic process specs**

SHOP PRACTICES/PROCESSES

- Specific to a repair station and may vary from one to another
 - Equipment or component receiving/handling
 - Inspecting/cleaning/shipping
 - NDT procedures or other type of inspections
- Do not contain technical engineering data/info that require ACO/DER approval
- May have been accepted by the FAA (AC 43.13-1B/-2A) or industry

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

COMPLIANCE INSPECTION

- ACO/DER/FSDO performs the compliance inspection to ensure the installation meet the regulations. For example:
 - Propeller clearance, FAR 23.925
 - Misc. Markings and Placards, FAR 23.1557
 - Warning, Caution, Advisory Lights, FAR 23.1322.
- Certain compliance inspections are reserved for the FAA
 - Emergency evacuation and exits, FARs 23.803 & 23.807
 - Width of aisle, FAR 23.815
 - Fire zone and flammable fluid protection, FAR 23.863
 - Delegated on a case-by-case basis to DERs

CONFORMITY INSPECTION

- A&P mechanic/IA/FSDO conducts the review to ensure
 - The part/equipment is installed IAW the drawing
 - The part/equipment is repaired IAW the repair data
 - The instrument/equipment is within the calibration date/data
 - The part/equipment has the correct part and serial numbers
 - The overall airworthiness of the aircraft

NOTE: IAW (In Accordance With)

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

FIELD APPROVAL PROJECT COMPLETION

- DER data package is complete, thorough, and applicable to the modification
 - Form 337 is filled out except for
 - Block 3 (FSDO Approval), Block 6 (A&P Mechanic for conformity inspection), and Block 7 (IA return to service)
 - Block 8 of Form 337 must reference:
 - The 8110-3 or other approved means (SB, AD, etc.)
 - AFM/RFM Supplement, if required
 - IFCA if different from OEM procedures
 - Installation instructions, wiring diagram, CMM, IPC, SRM, etc.
 - Any other documents that are used to accomplish the modification
 - AC 43.13-1B, Chapter xx, Page xx

FAA Handbook/Orders - ORD 8300.10-02-01
Volume 2 Chapter 1 Perform Field Approval of Major Repairs and Major Alterations

U.S. Department of Transportation Federal Aviation Administration		Form Approved OMB No. 2120-0020 For FAA Use Only	
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		Critical Identification	
<small>INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).</small>			
1. Aircraft		Model	
Serial No.		Nationality and Registration Mark	
2. Owner		Address (As shown on registration certificate)	
Name (As shown on registration certificate)		Address (As shown on registration certificate)	
3. For FAA Use Only			
4. Unit Identification			
Unit	Make	Model	Serial No.
AIRFRAME	(As described in item 1 above)		
POWERPLANT			
PROPELLER			
APPLIANCE	Type		
	Manufacturer		
5. Type			
Repair Alteration			
6. Conformity Statement			
A. Agency's Name and Address		B. Kind of Agency	
		U.S. Certified Mechanic	
		Foreign Certified Mechanic	
		Certified Repair Station	
		Manufacturer	
C. Certificate No.			
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.			
Date		Signature of Authorized Individual	
7. Approval for Return To Service			
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is:			
<input type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED			
BY		Signature of Authorized Individual	
<input type="checkbox"/> FAA Part 135/137 Inspector	Manufacturer	Inspection Authorization	
<input type="checkbox"/> FAA Designee	Repair Station	Person Approved by Transport Canada/Aerobusiness Group	
Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual	

FAA Form 337 (12-88)
CATP U.S. Aviation Regulatory - 12/02/99
Printed 12/11/99 08:55AM

Los Angeles DER Recurrent Seminar - September 27, 2000

Update on Field Approvals

FAA Handbook Orders - ORD 8300.10-02-01
Volume 2 Chapter 1: Perform Field Approval Of Major Repairs and Major Alterations

<p style="text-align: center;">NOTICE</p> <p><i>Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.</i></p>
<p>4. Description of Work Accomplished <i>(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)</i></p> <div style="border: 1px solid black; height: 250px; width: 100%;"></div> <p style="text-align: center;"><input type="checkbox"/> Additional Sheets Are Attached</p>

DAFP 115, Aviation Registry, 12/02/96
Printed 12/11/96 09:55AM

